

AMENDMENTS TO THE CLAIMS

1 (Currently Amended)

A sprinkler head assembly having off/on water flow control for turning water off and on at said sprinkler head assembly, without interrupting water flow to any adjacent sprinkler heads, said sprinkler head assembly comprising:

- a) a generally upright tube which carries water from a subterranean water conduit;
- b) a sprinkler head body ~~at the upper end of~~ associated with the generally upright tube and at least one of said sprinkler head and generally upright tube having a duct extending therethrough;
- c) ~~an insert~~ a nozzle located ~~at said sprinkler head body~~ for allowing a directionalized spray of water from the subterranean conduit through the sprinkler head body; and
- d) off/on water flow control valve means comprising ~~a~~ an elongate stem extending into ~~one of said ducts~~ said duct and being angularly located with respect to a central axis of the duct for stopping water flow when the stem is in a first rotatable position in said duct and reinitiating a flow of water through said sprinkler head assembly when said stem is rotated about a central axis of said stem to a

second position ~~about an axis of said stem~~
which is rotatably located with respect to said
first position independently of a main control
therefor, thereby allowing servicing of said
sprinkler head assembly without the need of
controlling water flow at the main control
therefor or shutting off water flow to other
sprinkler head assemblies receiving water from
that subterranean water conduit, said duct and
said stem being arranged when in the second
position to allow complete water flow without
the nozzle present and to provide unobstructed
passage for debris and also allow complete
visual observation through said sprinkler head
assembly when removed from said subterranean
water conduit.

2 (Currently Amended)

The sprinkler head assembly of Claim 1 further characterized
in that said off/on control valve means is located in an upstream
position with respect to said ~~insert~~ nozzle.

3 (Currently Amended)

The sprinkler head assembly of Claim 1 further characterized
in that said off/on control valve means is located in one of a body
of the sprinkler head, or in a sprinkler head pop-up riser shaft,

or in an adaptive fitting between the sprinkler head body and the generally upright tube, and said control valve means is in an upstream position with respect to said ~~insert~~ nozzle to thereby cut-off water flow before the ~~insert~~ nozzle.

4 (Currently Amended)

The sprinkler head assembly of Claim 1 further characterized in that said duct passes completely through said sprinkler head assembly, and said stem extends into said sprinkler head assembly and has a surface facing said duct in said assembly to block off water flow when said stem is in a first position ~~into~~ in said duct and which allows water flow when said stem is rotated about its central axis so that an axis of ~~an~~ said opening in ~~the~~ said stem is aligned with the axis of the duct in said second position.

5 (Original)

The sprinkler head assembly of Claim 3 further characterized in that said off/on control valve means is located in a base of a shrub type stationary sprinkler head.

6 (Currently Amended)

The sprinkler head assembly of Claim 3 further characterized in that said control valve means is in a pop-up riser shaft which forms part of a pop-up sprinkler head and carries said ~~insert~~ nozzle at its upper end thereof.

7 (Resubmitted)

The sprinkler head assembly of Claim 1 further characterized in that said stem is angularly located with respect to an axis of said duct.

8 (Original)

The sprinkler head assembly of Claim 7 further characterized in that said duct has increased wall thickness and reduced diameter in the region of said flow control valve means.

9 (Currently Amended)

An adaptive member for use with a sprinkler head assembly and having a valve means to provide off/on water flow control at said sprinkler head assembly, said adaptive member comprising:

- a) a manually actuable on/off water flow control valve located in a position with respect to a generally vertically arranged tube having a duct associated with said assembly ~~and for allowing flow of water~~ and in which water flows through said sprinkler head assembly; ~~for controlling flow of water from the sprinkler head assembly supplied by a subterranean water sprinkler system line, and~~
- b) ~~a~~ an elongate stem forming part of said valve means extending into said duct and being located with respect to a central axis of said duct for stopping water flow when ~~in~~ said stem is in a first position and reinitiating water flow when said stem is rotatably shifted about its central axis to a second position which is ~~angularly~~ rotatably shifted to a second position with respect to said first position and independently of any main control for said water sprinkler system line; and
- c) a portion associated with said stem extending outwardly from said duct and being adjustable

to control the position of the stem in said
duct.

10 (Currently Amended)

The adaptive member of Claim 9 further characterized in that said stem has an opening aligned with said duct when said stem is in the second position and is out of communication with said duct when the stem is in the first position.

11 (Original)

The adaptive fitting of Claim 10 further characterized in that said generally vertically arranged tube is a riser tube and said fitting is attached to said riser tube which is used in or forms part of said sprinkler head assembly.

12 (Original)

The adaptive fitting of Claim 11 further characterized in that said off/on control valve forms part of said adaptive member and is located in a region of the generally vertically arranged tube or portion of said sprinkler head assembly and which has increased wall thickness in said duct in the region of said control valve with respect to the remaining portion of the duct.

13 (Resubmitted)

The adaptive fitting of Claim 10 further characterized in that said opening has a diametrical size approximately the same as the

duct and which opening can be rotated in so that the opening is aligned with said duct to allow water flow and stops flow when the stem is rotated so that an axis of the opening is generally perpendicularly located to a central axis of said duct.

A method for turning water flow off and reinitiating water flow at a sprinkler head assembly and which eliminates the need to control water flow from a master controller or sprinkler valve in order to enable cleaning or servicing or replacement of that sprinkler head, said method comprising:

- a) ~~installing~~ manually actuating a valve stem of
an off/on water flow control valve means in a
sprinkler head assembly connected to a
subterranean water pipe to a first position
where water flows therethrough;
- b) ~~manually actuating a valve stem forming part of~~
~~a valve means to turn water flow off at said~~
~~sprinkler head assembly by~~ rotating said valve
stem and an opening in said a valve stem
forming part of said valve means to a second
position where it is out of alignment with a
duct of said assembly;
- c) allowing for cleaning or servicing of said
sprinkler head assembly with little or no water
flowing through said assembly under pressure in
the second position; and
- d) rotating said plug back to said first position
so that the opening in said plug once again
becomes aligned with the duct after cleaning or
servicing to allow water flow to again commence

through said sprinkler head ~~assembly~~.

15 (Currently Amended)

The method of Claim 14 further characterized in that said method comprises locating said off/on control valve means in a position upstream with respect to ~~an insert~~ a nozzle on said sprinkler head assembly.

16 (Currently Amended)

The method of Claim 13 further characterized in that said method ~~allows for removal of~~ comprises removing said ~~insert~~ nozzle when water is turned off at said sprinkler head assembly, cleaning of the ~~insert~~ nozzle and re-introduction of the ~~insert~~ nozzle followed by initiating water flow again.

17 (Original)

The sprinkler head assembly of Claim 13 further characterized in that said stem is manually actuatable and extends into said duct generally perpendicularly to a central axis of said duct.

18 (Resubmitted)

The adaptive fitting of Claim 17 further characterized in that said stem is threaded for manually turning said stem to cause said stem to rotate to said first position in said duct and to also rotate to said second position in said duct.

19 (Original)

The adaptive fitting of Claim 13 further characterized in that a tool receiving area is formed at an end of said plug to cause threaded turning of said stem in said duct.

20 (Original)

The adaptive fitting of Claim 19 further characterized in that said stem has a diametrical size at least as large as that of the duct.

A sprinkler head assembly having off/on water flow control for turning water off and on at said sprinkler head assembly, without interrupting water flow to any adjacent sprinkler heads, said sprinkler head assembly comprising:

- a) a generally upright tube which carries water from a subterranean water conduit;
- b) a sprinkler head body at the upper end of the generally upright tube and said sprinkler head and generally upright tube having a duct [in] extending therethrough;
- c) a nozzle located at said sprinkler head body for allowing a directionalized spray of water from the subterranean conduit through the sprinkler head;
- d) off/on water flow control valve means comprising an elongate stem extending outwardly to at least an exterior surface and extending inwardly into said duct; and when said stem is rotated to a second position about an axis of said stem and independently of a main control therefor, thereby allowing servicing of said sprinkler head assembly without the need of controlling water flow at the main control therefor or shutting off water flow to other sprinkler head assemblies receiving water from

that subterranean water conduit; and

- e) an opening in said stem and permitting water flow through said duct and outwardly of the sprinkler head body when in a first position with respect to said duct and prevents water flow when in a second position with respect to said duct.

22 (New)

The sprinkler head assembly of Claim 21 further characterized in that said stem is arranged when in the second position to allow complete water flow and to also allow unobstructed passage for debris and complete visual observation through said sprinkler head assembly when the nozzle is removed and when removed from said subterranean water conduit.

23 (New)

The sprinkler head assembly of Claim 21 further characterized in that said off/on control valve means is located in one of a body of the sprinkler head, or in a sprinkler head pop-up riser shaft, or in an adaptive fitting between the sprinkler head body and the generally upright tube, and said control valve means is in an upstream position with respect to said nozzle to thereby cut-off water flow before the nozzle.

24 (New)

The sprinkler head assembly of Claim 23 further characterized in that said duct passes completely through said sprinkler head assembly, and said stem extends into said sprinkler head assembly and has a surface facing said duct to block off water flow when said stem is in a first position in said duct and which allows water flow when said stem is rotated about its central axis so that an axis of said opening in said stem is aligned with the axis of the duct in said second position.

25 (New)

The sprinkler head assembly of Claim 24 further characterized in that said off/on control valve means proportionally controls water flow through said duct when said stem is in positions between the first and second position.

26 (New)

The sprinkler head assembly of Claim 23 further characterized in that said stem is angularly located with respect to an axis of said duct.

27 (New)

The sprinkler head assembly of Claim 23 further characterized in that said duct has increased wall thickness and reduced diameter in the region of said flow control valve means.

28 (New)

The sprinkler head assembly of Claim 27 further characterized in that the amount of water flow is proportional to the position of the stem between the first position and the second position.

29 (New)

The sprinkler head assembly of Claim 9 further characterized in that the portion which extends outwardly is integral with said plug.

30 (New)

The sprinkler head assembly of Claim 29 further characterized in that the portion which extends outwardly is both integral and axially aligned with said plug.

31 (New)

The sprinkler head assembly of Claim 30 further characterized in that a manually engageable and manually actuatable element is on said portion for moving said valve plug.